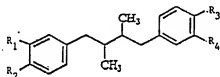


Listing of the Claims:

1-8. (Canceled)

9. (Previously presented) A method for treating leukemia, said method consisting essentially of the steps of: (a) providing a composition consisting essentially of an effective amount of a compound of formula:



wherein R₁, R₂, R₃, and R₄ independently represent -OH, -OCH₃, -O(C=O)CH₃, or a substituted or unsubstituted amino acid residue or salt thereof, but are not each -OH simultaneously; and optionally one or more pharmaceutically acceptable excipients or carriers; and (b) administering the composition to an individual in need of treatment.

10. (Previously presented) The method of claim 9, wherein the individual is a mammal.

11-14. (Cancelled)

15. (Previously presented) The method of claim 10, wherein said mammal is a human.

16-17. (Canceled)

18. (Previously presented) The method of claim 9, wherein said compound is administered along with at least one pharmaceutically acceptable excipient or carrier.

19. (Previously presented) The method of claim 18, wherein said excipient or carrier is dimethylsulfoxide.

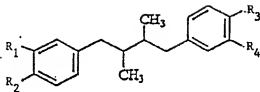
20. (Previously presented) The method of claim 9, wherein said compound is tetra-O-methyl nordihydroguaiaretic acid or meso-1,4-bis[3,4-(dimethylaminoacetoxy)phenyl]-(2R,3S)dimethylbutane.

21-31. (Cancelled)

32. (Previously presented) The method of claim 9, wherein the effective amount of the compound is selected from the group consisting of: at least 20 μM , at least 40 μM , at least 60 μM , at least 80 μM and at least 100 μM .

33. (Previously presented) The method of claim 9, wherein the effective amount of the compound is selected from the group consisting of at least about 10 μM , at least about 20 μM , at least about 30 μM , at least about 40 μM , at least about 50 μM , at least about 60 μM , at least about 70 μM , at least about 80 μM , at least about 90 μM , and at least about 100 μM .

34. (Withdrawn) A method for treating leukemia, said method comprising the steps of: (a) providing a composition comprising an effective amount of a compound of formula



wherein R₁, R₂, R₃, and R₄ are identical and represent a substituted or unsubstituted amino acid residue or salt thereof, and (b) administering the composition to an individual in need of treatment.

35. (Withdrawn) The method of claim 34, wherein the individual is a mammal.
36. (Withdrawn) The method of claim 35, wherein said mammal is a human.
37. (Withdrawn) The method of claim 34, wherein said compound is administered along with at least one pharmaceutically acceptable excipient or carrier.
38. (New) A method for treating leukemia, said method consisting essentially of the steps of: (a) providing a composition consisting essentially of an effective amount of a compound selected from tetra-O-methyl nordihydroguaiaretic acid or meso-1,4-bis[3,4-(dimethylaminoacetoxy)phenyl]-(2R,3S)dimethylbutane; and optionally one or more pharmaceutically acceptable excipients or carriers; and (b) administering the composition to an individual in need of treatment.
39. (New) The method of claim 38, wherein the individual is a mammal.
40. (New) The method of claim 39, wherein said mammal is a human.

41. (New) The method of claim 38, wherein said compound is administered along with at least one pharmaceutically acceptable excipient or carrier.
42. (New) The method of claim 38, wherein said excipient or carrier is dimethylsulfoxide.